



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,091	12/21/2001	Stephen R. Forrest	10644/11902	8289
26646	7590	03/03/2004	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			YAMNITZKY, MARIE ROSE	
			ART UNIT	PAPER NUMBER

1774

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,091

Applicant(s)

FORREST ET AL.

Examiner

Marie R. Yamnitzky

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004 and 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 75-109 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 75, 78, 80-83, 85-88, 91, 93-96, 98-102, 105, 106 and 109 is/are rejected.
- 7) ☒ Claim(s) 76, 77, 79, 84, 89, 90, 92, 97, 103, 104, 107 and 108 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date rec'd 09 Feb 2004.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1774

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicants' Supplemental Information Disclosure Statement received on February 09, 2004 has been entered. The cited references have been considered and are made of record. Rejections based on one of the cited references are set forth in this Office action.

Applicants' Amendment received on December 22, 2003, which amends claims 75, 76, 78, 79, 82, 88, 89, 91, 92, 101, 102 and 107, has been entered. Claims 75-109 are pending.

This Office action is also in response to the three Terminal Disclaimers received January 15, 2004.

2. The terminal disclaimer filed on January 15, 2004, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,198,091, has been reviewed and is accepted. The terminal disclaimer has been recorded.

The terminal disclaimer filed on January 15, 2004, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,198,092, has been reviewed and is accepted. The terminal disclaimer has been recorded.

Art Unit: 1774

The terminal disclaimer filed on January 15, 2004, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,278,055, has been reviewed and is accepted. The terminal disclaimer has been recorded.

3. The obviousness-type double patenting rejections set forth in the Office action mailed November 03, 2003 are overcome by the terminal disclaimers filed January 15, 2004.

The remainder of the issues raised in the Office action mailed November 03, 2003 are overcome by applicants' amendment received December 22, 2003 or are withdrawn as noted in the Advisory Action mailed January 26, 2004.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 75, 78, 80-83, 88, 91, 93-96, 101 and 102 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonnet al. "Organic Solar Cells - an Experimental Study", 13TH European Photovoltaic Solar Energy Conference, October 23-27, 1995, pp. 1685-1688.

See the whole article, especially the paragraph bridging the two columns on page 1687.

Art Unit: 1774

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 85-87, 98-100, 105, 106 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnet et al. as applied to claims 75, 78, 80-83, 88, 91, 93-96, 101 and 102 above, and for the further reasons set forth below.

With respect to present claims 85, 86, 98, 99, 105 and 106, the prior art pertains to organic solar cells and notes that improvements are needed in device structure and materials. It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to optimize the solar cell based on the intended use of the solar cell.

With respect to claims 87, 100 and 109, the prior art teaches that in tandem cells, a transparent contact is required between adjacent cells. The specific contact disclosed in the prior art has a bilayer structure consisting of a 20 Å thick film of silver and a 20 Å thick film of copper. The prior art teaches that this contact has "reduced transparency" but does not specifically disclose what percentage of ambient electromagnetic radiation is transmitted through the bilayer structure. However, based on the express teachings regarding the need for transparency, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to optimize the contact so as to increase the amount of ambient electromagnetic radiation that can be transmitted through the contact.

Art Unit: 1774

8. Claims 76, 77, 79, 84, 89, 90, 92, 97, 103, 104, 107 and 108 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes.
(Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY
February 26, 2004



MARIE YAMNITZKY
PRIMARY EXAMINER

1774